

# **L&I Ergonomics Rule Making Advisory Committee**

## Minutes of the April 27, 1999 Meeting

The Department of Labor and Industries convened the fourth meeting of the Ergonomics Rule Making Advisory Committee on Tuesday, April 27, 1999.

**Members Present:** Greg Bang, Patty Barcelona-Wilder, Buck Cameron, Don Dahman, Bill Daniell, Steve Davis for Kate Stewart, Jeff Dodd, Jerry Effenberger, Dan Foster, Laurie Garcia for Loren Schroeder, Joan Gribskov, Gene Hain, Dan Henderson, Jay Herzmark, Bob Hollingsworth, Lynn LaSalle, Jeff Lutz, Laurie Merta, Ellen Meyer, Sharon Ness, Janet Peterson, Thomas Plummer, Brad Prezant, Steven Richard Smith, Kathy Sutphin, Frank Turman, Howard Theimens, Scott Walker, and Roger Yockey.

**Members Absent:** Michelle Kom Gochnour.

### **Welcome**

John Peard welcomed everyone to the fourth meeting of the advisory committee. He said that several members of the Construction Advisory Committee's Subcommittee on Ergonomics Rule Making were present to hear the speakers from British Columbia. He asked them to introduce themselves.

### **Minutes of the April 6, 1999 Meeting**

John Peard asked if any members had corrections or changes to the minutes of the April 6, 1999 meeting. No one did.

### **British Columbia's Ergonomics Rule and Rule Making Process**

John Peard introduced the three speakers from British Columbia:

- Bawan Saravana-Bawan, who is an ergonomist with the British Columbia Workers' Compensation Board (WCB), Prevention Division.
- Ian May, who is vice president for regulatory issues with the Council of Forest Industries of British Columbia.
- Jim Parker, who is secretary for Local 217, IWA (International Wood and Allied Workers) Canada.

(Note: The effective date of the BC regulation was April 15, 1998. Enforcement of the regulation began April 15, 1999 for five specific "high-risk" industries. Enforcement will begin April 15, 2000 for all other employers.)

Bawan briefly outlined the development of British Columbia's ergonomics regulation. Employer and labor groups were involved in committees to provide advice on the regulations to WCB. The WCB and a working committee developed the basic framework of the regulation in about three months. They took longer to put together a "code of practice" manual as part of the proposed

regulation. This manual was eventually dropped as part of the regulation due to opposition expressed at the public hearings.

The objective of the regulation is to minimize the risk of musculoskeletal injuries by addressing six main risk factors: force, repetition, posture, vibration, contact stress and cold temperature.

Bawan described the steps that employers must take under the rule:

1. Seek input from affected employees.
2. Provide basic education in risk factors and symptoms of MSI to all employees.
3. Provide detailed education to safety committee members and supervisors.
4. Identify the risk factors using a "reasonable approach" that focuses on high-risk jobs.
5. Assess the risks based on how much, how long, and how often employees are exposed.
6. Control the risks using engineering or administrative controls.
7. Provide training for workers on their proper use of controls in their jobs.
8. Evaluate the effectiveness of the above steps at least annually.

He also provided a handout of his overheads, which listed key points about the evidence of compliance that WCB inspectors would look for during inspections.

Other important points that Bawan raised about the rule include:

- It is a performance-based, rather than a specification rule.
- It follows the format used in BC's other health and safety regulations to make it easier to integrate into existing programs.
- It is part of the BC "core" requirements which all employers are expected to follow.
- It emphasizes employee participation. They reasoned that 80% of problems could be solved at the "shop floor" level.
- If it's possible to implement a simple solution to an obvious risk, then no assessment step is necessary.
- In the original proposal, engineering controls were given preference over administrative controls. However, at the public hearings an effective argument was made to give the two control types equal weight, which is how they are described in the final regulation.

Bawan answered the following questions:

*What are some of the industries that compliance will be focusing on first, and what is the compliance process like?*

Health care, retail food, trucking, construction and forest products. The way compliance works now, they go in and see if an employee involvement system is in place and if the employer had done the education required. Then they look to see if the employer has gone through the risk identification process, and has done what is practical and reasonable given the task and any site-specific issues.

*How are small employers being trained? Are the support materials being offered sufficient?*

We have supporting documents, and we'd like to add them to the web site. The WCB focuses on helping small employers. We will come in to their business and do three to four hours of education, as long as employers promise to make an effort as well and survey their high-risk

jobs. We'll then go over the videos of the high-risk jobs as part of a risk identification workshop. We're able to show employers that this isn't rocket science. The focus is: Fix what you can now, use your internal knowledge, and then seek additional help if you need it.

Jim Parker and Ian May presented the management and labor perspectives of the rule development process. They described how it began with differing opinions about the draft regulation, but a mutual understanding that musculoskeletal injuries were a serious problem and that ergonomics provided a solution. They cooperated in developing a specific program to reduce musculoskeletal injuries in the sawmill industry. This program developed at the same time the BC regulation was being developed, so they were able to consider and incorporate elements that would position their program to be in compliance.

In the sawmills, they identified 102 jobs that are found in most mills, which they called common industry jobs. They did a baseline evaluation of these jobs, and then presented the data to the WCB and suggested that they fund a further study. There are 618 sawmills in BC, with 23,000 employees, and it would be a big task to review all of the jobs. There are also a lot of small mills, so any program developed would have to be practical. They were able to entice employers to participate in the program by offering them customized reports, which described the risks for injury and solutions specific to their industry.

As part of the reports they developed toolkits, such as physical demands analysis for all of the jobs which allowed physicians to make more informed decisions about returning workers with restrictions to their jobs. They also developed a system for identifying appropriate controls based on their effectiveness, cost to implement, time required to implement, percentage of workers impacted, likelihood of acceptance and effects on productivity and quality. In addition, they came up with a body manual which could be used to educate the workers on the parts of their bodies at risk for injury and how they could take care of themselves.

They listed the benefits of the program as:

- A reduced risk of injury and improved recovery from injury for workers.
- New tools, checklists, and training for safety and health committees.
- Decreased costs and improved productivity and quality for employers.

They also cited the willingness of all of the employers in the sawmill industry to share information and the costs of the program as one of the main reasons that it was successful.

Jim Parker, Ian May and Bawan answered these questions:

*This is a new regulation. Are you seeing any reductions in injuries yet?*

It's too early to say. We're still working on the metrics that we'll use to measure the effectiveness of the rule. We expect a spike in injuries due to awareness; that's something the industry accepts as part of the education process. In the mills that ergonomics folks have visited, we have seen all injury types reduced, not just the musculoskeletal injuries that we expected.

*How were the numbers set for how much is too much, or too long?*

That's been a big debate. Specific numbers aren't part of enforcement, but they can be used to determine what is reasonable. When you're setting numbers for lifting limits, for example, weight alone isn't the only factor. You need to look at posture, grip, etc.

*For education, is that a one-time thing or is follow-up required?*

It's similar to other safety and health training requirements in BC. If there's a new worker they need to be trained, and you need to have an ongoing program. It's performance-based.

*How can we encourage other industries to implement this type of program?*

Having an industry-wide program makes a big difference. The regulation helps to push things into smaller employers. Economics is a big driver. For example, the body manual isn't a product of the regulation; we did that because it makes sense. If you can reduce injury costs, and therefore labor costs, it gives you a competitive edge. That's the business case for doing it.

*The body manual - has that been accepted by industry? Is it making a difference?*

It's too soon to tell. It will be available through the WCB, free to employers in the province, and at a nominal charge to everyone else. It does help to demonstrate ergonomics principles.

*For something like check-stands in grocery stores, I know their design is already covered under union negotiations in BC. Would you just build on this, since it already exists, when you do a similar project for retail food?*

Yes. Small employer groups have grants available to them, as long as they have partnerships between management and labor where they'll work cooperatively. For a best practices document on check-stands, they may come up with an improved design, but we know it's not reasonable to expect everyone to retrofit all of their check-stands to meet the new design. However, we would expect that when they purchase a new check-stand, that it would be the new design, since the cost wouldn't be that much more. One of the things we've found is that most of the equipment employers need to meet the rule is already in place, but workers haven't been trained on how to use it properly. The rule hasn't been as big a shock as anticipated.

*I like the job and industry specific approach you took. What were the costs of the sawmill project?*

The project cost \$5 million, which included the cost of the education, training and monitoring pieces. For the monitoring, we developed a computer program that lets us link directly over the Internet to the WCB database so that employers can store and access their training and other records in a central location. The costs of the solutions are still unknown. Some small mills may just do rotation. Those decisions are specific to each mill. We probably won't know the overall cost/benefit numbers for another five years. I can tell you that we were glad that the requirement to try engineering controls before administrative controls was removed from the rule. Results from one sawmill showed an increase in productivity that led to a payback period of less than one year. We're doing it in affordable bites. Many of the recommendations for changes come at the work site level.

*Do you have any documents describing the effects on productivity?*

No.

*When you were developing the sawmill program, did you talk with the WCB?*

Yes, in the beginning we were involved in developing the regulation. We were able to get our program up and running before the regulation was finished. The WCB developed the regulation after getting our input.

*Did it take you longer to develop the regulation than you originally thought it would?*

It only took about three months to develop the framework for the rule. We ran into problems with the Code of Practice, which spooked a lot of people. They thought that the code would end up being a compliance document. It took us eight months to deal with that issue, and finally we just decided to unlink the Code of Practice from the regulation.

*Will the tool kits from the sawmills be available from the WCB as well?*

Yes.

*What would you do differently in developing your rule if you had it to do over?*

We got into more details than we needed to. We wasted a lot of time arguing about the wording of the regulation.

*You talked a lot about involving the "occupational health and safety committees" in BC. What kind of structure do they have?*

In BC, any employer with 20 or more employees needs to have one, although some high-hazard employers would need one even if they were smaller. The committees need to be made up of at least four people, with at least an equal number of workers as management. Worker representatives are either appointed by the union or elected by their co-workers. The committee must meet monthly, and they conduct inspections, incident investigations, and make recommendations. The committees are evolving into a very useful tool.

*With the regulation in place, and controls required, is there any worker responsibility required by the regulation?*

In our general health and safety regulations it states that the employer has the responsibility to set work processes and safety requirements. The employer is also responsible for enforcing those requirements. They need to have a policy, and it needs to be reasonable. If employees are not following safety rules and they have been trained and supervised on what to do, they need to be addressed/disciplined as they would for other company rules.

*For enforcement, you said that it was a staggered approach targeting high-hazard industries first, before moving on to other industries. How long do you expect the entire phase-in period will last?*

We've been able to identify those at risk through statistics and get a printout of the worst firms. We go to the employer with these statistics first in order to convince them, to get buy-in on the process. We also need to respond to employee complaints at firms that aren't on the printout.

*You mentioned job rotation as a potential solution, but a lot of times unions don't like it because of their emphasis on job descriptions. How did the unions in BC deal with this issue?*

It varies by place. In some places you can do it because everyone who is rotated is paid the same rate. There can be problems when there is a collective agreement, however.

*For injuries like sprains and strains, especially to the back, how do you distinguish between work-related and non-work-related injuries?*

The sawmill program applies to non-work factors as well, but they're considered separately. The main focus is to reduce work-related injuries, but the tools can be used for non-work injuries, too, for example, with returning an injured employee to work. We have gotten requests to do an ergonomics analysis of a job to prove that an employee could not have been injured on that job, but we've refused to do them. The focus is looking at the risk factors.

*Has there been any special training for WCB inspectors?*

There was a three-day training program for our industrial hygienists on risk factors and ergonomics principles, similar to what's covered by the NIOSH training manuals. It seems to be working well.

*Has WCB compliance reviewed the sawmill programs?*

It's still too early. We're currently matching the program to the WCB requirements. We currently are focusing on firms with incidence rates that are worse than the industry average.

## **Staff Update/Committee Feedback**

John Peard said that L&I has received two letters from several members of the advisory committee, and copies have been given to the rest of the committee. If other committee members have input to share, they should contact John. L&I will soon provide a written response to the letters.

John Peard also asked if there were questions about the materials distributed at the April 6 meeting that addressed items on the Bring Up Later (BUL) list. Discussion followed.

- Jerry Effenberger stated for the record that he had talked with one of the presenters from BC during the break. Based on this discussion, he feels that the financial impacts of following the BC rule could be large for small business.

## **Comments on the Bring Up Later List**

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| <ul style="list-style-type: none"><li>➤ A half-hour to go over these important topics is not enough. Last time we got an inch-thick stack of materials to review. I didn't volunteer to make this my life's work. Unless we have time to review the data and discuss it, then what's the point? There's not time to review all of this outside of the committee. I'm not an ergonomist.</li></ul> | <ul style="list-style-type: none"><li>➤ With any committee, there is an expectation that you will have to do some homework. We don't have time to review the material here, so it will have to be done outside of the committee meetings.</li><li>➤ I'm not sure everyone got the copy of the letter I sent out; I was unable to fax it to some of the committee members. I also am frustrated with the amount of materials. You need to make time to do the homework as a committee member. I read the materials on an airplane.</li></ul> |
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*John Peard replied that the committee had requested all the materials that were passed out.*

- I have a business to run; I'm a farmer, I don't sit behind a desk. I volunteered for this; I'm not being compensated. I'm here because I'm scared of what you might do to small business. This binder grows every week. I just have to touch it and I'm asleep.
- There is a lot of material. Most of it was requested by the committee, because some of the members distrust that MSDs are due to work. L&I was asked to provide supporting evidence. If you can read it and weigh the evidence, you'll see that there's a reason why we're here. We need to move forward with it.
- I haven't read all of the material, but I appreciate having it. I agree with the previous statement about all of the supplemental materials. You asked for the data and now you're not happy with it. I'm confused about why you think there's too much.
- What data did I ask for?
- You asked for information on programs that work and data on injuries.
- For the record, Jerry Effenberger said: I did read the data. It was a bit much. I found it very one-sided. It's all in support of programs and it all alleges that these injuries are caused by work. I have not seen a balanced presentation from the committee.

*John Peard responded that the committee asked for success stories and that was what was provided.*

- There is a limit to what you need for balance. You can find "unsuccess" stories in any workplace that doesn't have an ergonomics program. They're not hard to find. It's important to see success stories because they describe something that works. If there were something balanced that says that programs don't work then it would be good to see. I don't see a lack of balance in what we've been given.

- I read a lot of research and I don't see much published that says that ergonomics doesn't work or that programs are costing businesses money. This is not just in the occupational health literature, but also in the general safety publications. The literature shows that if you put in programs, you have a positive impact on productivity, on reducing injuries, lowering costs, etc. Show me something negative in the literature.
- I won't dispute your words. We have to come up with rules that we can live with. Don't bury us in paper. This rule may save us money in one place, but then I have to hire someone to deal with all of the paperwork and record keeping. Every employee off the job costs money, and then there are training costs. What rule are we going to make – that's why we are here.

*Michael Silverstein said L&I has provided information to help the committee assess what should and should not be in a rule, and gathered supplemental material requested by the committee. He said some of the information L&I provided contained opposing viewpoints. The paired documents (e.g., the results of the NAS study and the NCE critique) from the second meeting were examples.*

- I wasn't aware of handouts that expressed opposing views. I would like copies of those.
- I'm also frustrated. I wish we had more time to study the information. We're in a canned process and there's no going off course. I have a lot of questions. I'm not set in my ways. But I'm not doing a good enough job, not doing it justice. There's too much information to understand.
- I've served on many committees like this before. The first few meetings of this type involve a strong learning curve. I've learned a lot and I've seen others around this table learn. Before we discuss what's in a rule, we have to go through the learning process. It can lead to frustrations and difficulties in keeping up, but that's just the way it works.

- We need to be honest. Each of us comes with specific interests, whether we're representing workers or business. There's some value in hearing the different views. But there is coaching going on from trade associations, and it's not always the committee's views that are being expressed. If they had wanted that, L&I could have just invited the AWB and the Labor Council here. In the future, I ask that we represent ourselves and not associations. We heard a good presentation from BC. It's hard to shift gears to look at other models. I would have preferred to just discuss BC in detail today. I'd like to hear what others think are the pros and cons of the BC approach.
- I realize I get information from other groups. I think that's part of my job as a committee member – to reach out to other groups and get their ideas. But I do have my own ideas. If I say something, it means I believe in it.

*John Peard said the committee could talk about BC as part of the afternoon discussion of integrated models.*

*Michael Silverstein said the next part of the agenda would show a range of options – some would be closer to the BC model, others farther away. He hoped there was plenty of time to talk more about BC, but, if there wasn't, more time would be provided to digest the BC information.*

*John Peard asked if there were any other comments or any questions about the BUL list.*

- I suggest that if anyone has comments about the letters that they send in a letter of their own. I don't want to waste time on this. It's obvious that we all come in with different opinions. We need to move on.
- I have a question about an item from the BUL list. We asked at one time for information on citations that L&I has written on ergonomics hazards – the number and the type. What we got was model language. What we're looking for is data on what L&I has done in the past to require compliance, how many citations there were, and what was cited.
- I think he is asking for the information you e-mailed me, John. I think there were something like 13 citations in recent years.

*John Peard said the requested information would be provided.*

- I want to revisit a question I asked at an earlier meeting; that is, how does ergonomics affect the temporary work force? I would like this committee to brainstorm this question and/or get some information from L&I.

*John Peard said this is an important issue that will be integrated into the committee's discussions.*

## **Discussion of Integrated Models**

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*John Peard referred the committee to Issue Paper #7: Integrated Models and invited members to discuss the three models and any others they wanted to present.*

- Patty Barcelona-Wilder introduced another option that she called a "focus model." She worked with some other business

representatives to develop the proposal, "Outline of a Rule Option Based on OSHA 200 Log Compensable Claims for Repetitive Motion Injuries," which she passed out to the committee members. The trigger in this model would be two or more compensable claims for the same repetitive motion injury in the same activity. Once the employer determined that the rule applied, the



employer would be required to develop a plan to address the injuries. The proposed elements of the rule are detailed in the handout.

- Patty stressed several points about the model:
  - "Preferred Employer Status." Employers who proactively adopted ergonomics principles and are not subject to the rule, would be eligible for incentives, such as reduced inspection activity.
  - Employer immunity from liability. Employers could not be sued by employees claiming that an ergonomics tool the employer provided caused them injury.
  - Medical management. This would be handled under the existing workers' compensation structure.
  - Employee responsibility and disclosure. Employees would be responsible for following the ergonomics guidelines their employers provide. They also would have to disclose any pre-existing medical conditions so the employer could take steps similar to reasonable accommodation under ADA. Information on pre-existing conditions could not be used by the employer to fire or otherwise retaliate against those employees.

*John Peard said Patty's focus model would be added to the models under discussion. He asked whether other committee members had models to present.*

- A committee member asked that the minutes clearly indicate that the focus model was presented by Patty and did not come from Labor and Industries.

*John Peard said there are some similarities between the focus model and the response model.*

- Patty said it is similar to the North Carolina proposal in the way it deals with medical management.

*John Peard asked the committee to look over the three models included in their agenda materials. He explained that one section of Issue Paper #7 listed possible common features of any*

*regulatory package. Another section, Attachment A, listed some of the main ideas and issues the committee had raised about possible rule elements.*

*Michael Silverstein added that there are three basic ways to do any rule – a prevention approach, a response approach, and a program approach. There are a lot of possible variations under each model. He said he would like to know what the committee feels are good and bad points about each approach. He also reminded the committee that Dan Henderson had sent in suggested elements to consider.*

- Dan Henderson said there weren't a lot of details in the model he shared. The model places language on ergonomics into the existing Accident Prevention Program (AAP) and clarifies employers' responsibilities regarding ergonomics.
- It seems to me that there's a trade-off between the amount of protection and injury prevention that a rule provides and the time and expense involved in implementing the requirements of the rule. You could do a cost-benefit analysis for each model if you could isolate those workers most likely to get injured. An injury-based model, whether it requires one or multiple injuries to occur before being implemented, seems less inclusive of the at-risk population. Can we rate each model on its public health impact by comparing the percentage of workers that each model would pick up and the costs to implement each model? Is this something that L&I would be able to quantify for us? If you look at all of the options, you wonder if there is a benefit to assessing every job versus only looking at jobs where someone was injured or jobs where there is a high risk of injury. I don't know how to evaluate these models without this information.
- Doesn't L&I compliance focus on standards? Don't L&I inspectors use SHIMS, which lists the injury and illness claims for employers, before going out on inspections? L&I targets high-risk occupations first, and also does some

random inspections. If that's the case, wouldn't an injury-based approach fall in line with current L&I practice?

*John Peard said we have provided statistics on industries with the highest claims rates, but that he didn't think that that's what Brad was referring to when he talked about cost-benefit models.*

- If we look at the models - one says that all employers should have a program, and that might result in wasted effort. However, the other models might miss many workers who will be injured. We need some idea of how many workers will be included who need ergonomics compared to how many workers who may be excluded who also need ergonomics. One test of the rule's effectiveness will be if it doesn't apply to people who don't need it.

*John Peard said that there are no quick answers to (Brad's) questions, but they raise good issues.*

- Are you talking about people who are high risk or jobs that are high risk? In other words are you trying to identify workers with a certain body type or lifestyle that put them at risk for injury?
- I'm talking about jobs. On average, how many workers would be at risk, not individual factors that cause risk.
- Individual employee characteristics are just as important to evaluate as taking a look at the job site. Physical and mental characteristics all have an impact. They're what make the difference when you have two people doing the same job, and one is injured while the other one is not. If we test for drugs in the workplace, why not test for pre-existing conditions?
- It's hard to test for pre-existing conditions. I prefer a more holistic approach where you target everyone. Is it more cost effective to spend \$1 on 100 employees who might get hurt or \$100 on the employee who gets hurt? We're looking for where to start. The BC

approach uses risk factors as one criterion and focuses first on the industries with the most injuries. But for the rule itself, I like the holistic approach where we take a look at and educate everyone.

- I struggle with the concept of cost-benefit relative to rules. I see people incapacitated. How do you compare the cost of rules versus saving on claims when people are in pain, are suffering, and are losing income? What we know is a rule will save many people. My concern with the response model is it gives employers an incentive to fight claims in order to lessen their exposure to inspections. And, while I have had concerns about performance-based standards, it may be the only way we can go that gives different industries the flexibility to address MSDs most effectively.
- I use a database that covers 10 years of injuries. It shows a lot of employees are hurt more than once. Physical characteristics play a role, yes, but work habits play a more important role. The rule needs to look at work tasks and at a process that has employers evaluate the way workers perform the work. This is all part of a continuous improvement process. I'm not really in favor of any of the models. Employers need to have lots of flexibility, but they must have a program.
- I have found that often employees who are repeatedly injured are also performing poorly on the job. Poor performers need to be dealt with on the basis of their performance and their failure to follow safe work practices, not on the basis of injury. This shouldn't be part of the rule.
- I think we need a prevention model – at least as a place to start. Small businesses that have one to three employees need a program rule that's just one-page, like British Columbia. Ours can be short, too. The little Mom and Pop firms don't have time for the paperwork that a long rule might have. Typically, a prevention approach is going to cost more. But I'm concerned about a

response model. I can tell you, as a physician, there is tremendous pressure not to identify a MSD as work-related. I could see a real mess with a response model. For example, an employee could come in with carpal tunnel syndrome, and maybe they work for an employer who doesn't need to have an ergonomics program, yet.. I'm concerned about employers who would send the employee to doctors that they know wouldn't classify the injury as work related. Then, the employee ends up looking for a doctor who will allow their claim. In Patty's model, the exclusions, back injuries, one-time injuries, are the sentinel events that show something is developing.

- Patty said that the comment about one-time injuries was a misinterpretation of the "single event" exclusion in her model, which refers to MSDs from sudden events, like a slip and fall. She went on to say that the meaning of "short term" MSDs was those injuries which occur within 60 days of starting a new job, when the employee is first learning the job.
- The thinking in the medical community today is that back injuries are cumulative in nature.
- Yes, back injuries could go either way.
- Back injuries are like the straw that broke the camel's back, and they sometimes leave us wondering how what seems like a small event could have caused the injury, when actually it's cumulative exposure.
- With aging too, when people get out of shape.
- You only have to come into our rehabilitation services to see that.

*Michael Silverstein said he would like to hear from other committee members about the concerns that were raised about the response model, specifically, that it would raise the stakes whenever a claim is filed.*

- Using the rules about recordability under OSHA instead of claims as a trigger could eliminate some of the concerns about the response approach.
- I'm leaning towards a risk factor approach, like British Columbia's, with some sort of toolbox. Initially there might be lots of paperwork as you identify risk factors by body part, by job, and by the percentage of time spent on each task. If you identify a risk, that would trigger more work, but for businesses with no risks, there would be no more work after the initial effort. I'm leaning towards a rule like BC's.
- In smaller companies, the risk factor approach could be a hardship, especially since some of them might have no jobs that are at risk. My model includes a 'preferred employer status' component for employers who are proactive in looking at high-risk jobs. Incentives like reduced inspections could encourage their efforts.
- I support the prevention approach. The BC approach includes across-the-board education and allows employers to require employee accountability. This gives borderline employees a chance to help themselves to prevent injury. Both the management and labor representatives from the sawmill industry agreed that they wouldn't be doing their program if it didn't save them money. I hear employers complaining that they can't afford to do ergonomics, but it's up to L&I to make a flexible rule that is easy to follow. The bottom line is a win-win. Employers save money and the risk of injury is reduced, which is the reason why we're here. A prevention approach allows employers and employees to look at problem jobs objectively and find out why injuries are occurring. Employers can make and document changes, and this helps them with problem employees because they can show how they've decreased the risk factors. The employer less likely to get "dinged" for repeat cases and injuries that occur due to things that are outside their control.

- I favor the risk factor approach. With the response model, you're waiting for an injury to occur, and then it's after the fact. Somebody is already hurt, so it's not really injury reduction. If the risk factors are taken care of, we don't have to argue over whether the injury is work related or not, because there is no injury. The other models are not really preventative.
- I want to clarify Ian's comments about the costs of an ergonomics program and the benefits to business. I heard him say that in British Columbia sawmills they had failed to see an ergonomics program implemented where productivity did not go up. But how does that translate to increased margin? They said they didn't know what the cost outcomes of the rule would be. The cost could be staggering. We don't know yet.
- We can't deal with all of the possible contingencies. We have some science and we need to use what we know to deal with the problem up front. We should cherry pick the strong points from the different models to get the best combination, one that will be a win for everyone.
- With the risk factor approach, which could be very broad, we would need to deal with existing programs, recognize what they've accomplished. The other issue with risk factors is whether we have the resources – business, labor and L&I – to execute if it's broad-based? There are less than 1,000 certified professional ergonomists (CPEs) in the whole United States. We need to have our ducks in a row before we implement the rule. This is a huge task.
- British Columbia saw a reduction in injuries and a benefit in productivity, but I know that in Canada they have put some people out of work through mechanization. I'm not sure you'd call that a benefit. I like their approach - it's simple, there's no big hammer, they allowed variations and there's a long phase-in. They spent five years to get where they are; they've done their homework. Washington needs to do this right. Don't put a big hammer into L&I's hand. Make it small. Then, if businesses don't comply, make the hammer bigger.
- Defining risk factors is like defining confined space. There's a new definition with each inspector. Any business that has more than 10 employees has to have a safety committee. In my company, I use the OSHA 200 log and review incidents. There's an employer and employee side to this, and if it's not done right, the employees can complain about it. Put the safety committee to work. I liked the manuals that BC developed, but we don't have anything like that here. Don't reinvent the wheel. Train the committees within the company to look at the jobs and classify the risk factors. You're going to have problems defining risk factors because you don't know what's going on in my business. Use the safety and health committees. Then when L&I comes in, they can look for documentation of how the committee is addressing ergonomics issues.
- Well put, and that's the basis of the focus model. It uses OSHA recordables, L&I's resources and the safety committee effectively. The earlier suggestion to pick the best pieces from the models might be a problem for agriculture for some of the pieces. For example, retraining of temporary workers, who might only be hired for a two-week period, might not fit. Portions of each model have merit, such as having the safety committee do the work through recordable claims.
- I support the prevention approach, although I'm not sure yet what all would be included in it. We either pay now or pay later. With this approach we partner with employees. Education regarding ergonomics helps with what happens outside of work as well as at work. With any ergonomics program I've seen, employees view it as a benefit, and it's one of the few that benefits employers as well. It doesn't have to be all encompassing, just brief segments - 10 to 12 minutes - on how employees can help themselves. I also like the prioritization process. If there are

too many jobs, it is overwhelming, but prioritization lets us start with the most important job that we need to address. We fix that one and then move on. Definitions for the risk factors are needed. Education/training is a powerful piece that's been proven to work in the past.

- In our discussion of the models, we've been relating the things we say back to what we heard about British Columbia's approach. I think it's OK to continue as we have been.
- When we talk about BC, there are really two things that we heard. One was the standard, which was broad, and the other was detail of a specific program from a specific industry. That program isn't in all industries in BC, although the focus will move to other industries in the future.
- We have to look at training and education in context. In agriculture, the amount of training for a new employee is tremendous. We have more than a half dozen different topics we have to train on. Employees have reached a saturation point on how much they can absorb. We really have to keep this on the front burner – how are we realistically going to integrate training?
- That's a good point. British Columbia's approach sounds effective, but they have to wait and see how implementation works over time. I'm impressed by the focus on consultation vs. compliance. They helped businesses to understand the rule and implement a program. I hope we discuss how to implement here in Washington, and leave compliance alone until later, except those who repeatedly ignore the consultation results. Business will be intimidated by this rule and will need help and direction. L&I needs to be prepared to offer that assistance, and will need to have more resources available.
- I'm concerned about how the safety and health committee involvement would work. It's a good idea to have employee involvement, and right now the committees

do accident investigation but some committees only meet one hour a month. How are they going to add in ergonomics, too? Where I work we have 20,000 employees and only 11 safety committees. They won't be able to do it all. It may require an adjustment in how often they meet or a separate committee.

- Jerry Effenberger stated for the record that Dan Henderson's Option #6 fits what was suggested and that he supports it.
- In agriculture, we have more than a half dozen things we have to go over with our employees – all for a two-week harvest operation. Then they're gone.
- The training is getting burdensome, especially for temporary workers in agriculture. The training needs to be portable. That way you can share the cost of training across all employers who will hire that employee. They could be trained at the beginning of the season and given a card that shows they've had the class.
- Employers in the Farm Bureau Retrospective Rating group would look at training requirements like this and say 'it's part of doing business' and they'll help with any ergonomics rules that are adopted. Maybe we do need portability of training, like with the hazardous materials training.
- That's a good point, but it's not just agriculture where this is needed. Construction is another example. BC has a good model, with labor and management working together with industry-wide support from the Workers' Compensation Board, and it seems effective. L&I can't go to all industries and solve their problems for them. Industry must do this, take on the challenge and then ask L&I for help. Perhaps L&I can help with creating a mechanism for centralized recordkeeping or training, or maybe it should be done by the associations.
- The scaffold standard is another example, where portable training was provided to the

union membership. Each member was given a card that is portable between employers. We already see this working for industry-specific needs.

- These are valid comments. Portability is critical. We need to avoid redundancy, which is a waste of time. We could have some sort of card, like with the CSTOP program. BC is a good example of partnering, and by partnering I mean they put some cabbage (\$) on the table. They put up \$5 million for the project. I have empathy for small employers. We need to fund a program for industries, so that they can develop some good assistance materials.

*Michael Silverstein said he heard the BC presenters distinguish between education provided to all employees and training that was job specific.*

- In health care we have all kinds of cards that employees carry from one employer to another. Agencies provide the training for the temporary employees that they send out.
- Regarding Dr. Silverstein's comment: Training is not for all. It involves more money and it is interactive. It should be restricted to jobs requiring risk control where it's appropriate. That would help reduce the burden on employers who have jobs with few risks.
- I agree. Training is specific to the employer. Training is not just about the job, but also about lifestyle. It's a win-win situation for employers and their employees, because it results in a healthier employee. In response to an earlier comment, I'd also like to say that I don't know where it says that a safety committee can only meet one time per month.
- The Boeing Company Health and Safety Institute does training. The company estimates a \$20 return for every \$1 spent on education. Some basic things are taught to the whole population. But each division of Boeing is like its own little company. Each

individual area does its own job-specific training. The basic education works and we've reduced in workers' compensation claims because of it. And the training carries over off the job because we're teaching workers to be ergonomically aware of their bodies. The company and the union work together, which is why it works. Keeping the Health and Safety Institute going has never been a question at the bargaining table. They've always increased it because the benefits to people and the company are tremendous. The focus is risk-based, not injury-based. They've found that looking at risk factors results in a better return on their investment.

- The temporary workforce is everywhere now, and so we need to talk about increasing the transferability of training. Unless the jobs and tasks people are doing are the same, how will this be beneficial? For example, working at a tractor and picking cherries are two very different jobs. It's like forklift training, where you have different types of equipment, and how you train would depend on the particular piece of equipment being used. It will be a challenge to have applicable training, and it may not make a difference in reducing risk factors or injuries. Who will administer the program? How do we address this? Hopefully not through the standard. It would be better if we did it through associations or through industry.
- In my focus model, site training specific to the job is needed. Basic education of ergonomics could go from one job to another, and you could have a card. Like in banking, when tellers move from one branch to another. They would bring some basic education with them, but they would get training at each branch on how things are done there.
- Temporary employees raise certain concerns. But we haven't talked about long-term employees. What are the risks in doing the same thing for 20 years? I look at my own industry. I want to see us work in

cooperation with employer associations to see what education and training should be in this particular industry. I would like to end up with a report from our industry specific to what education on ergonomics we could do.

- Regarding portability of training: The rule needs to specify general versus specific content. General education could be on what risk factors are, what ergonomic injuries are, and what generic controls are available. That part could be portable. But employers must also do specific training at each site, and that part wouldn't be portable, unless the machinery used was the same.
- We should be careful about having too much specified in the standard about the content of education and training. A lot of those decisions should be left to employers. But the rule should allow for portability. That's not the case now for hearing conservation.
- I liked the way BC talked about prioritization. It's pretty well accepted that prioritization of potential hazards is needed. With the large number of potential problems on construction sites, they would be difficult to solve in a short period of time. We need to establish a hierarchy in order to reduce the workload for employers to get into compliance.

*Michael Silverstein asked how prioritization would do that. Would employers focus on 'worst first?'*

- Employers could look at the risk factors to see what jobs might be a problem. Then go to the OSHA 200 log and take care of the tasks that cause the most problems first. Then do a review and re-prioritize quarterly or semi-annually.

*Michael Silverstein asked whether the rating scales that Ian and Jim had from the BC sawmills would be helpful with that, or if they would be too much for some businesses to do.*

- Not for small business. They wouldn't understand them and they'd be overwhelmed. They'd just throw them out and wait for L&I to show up.
- This would just go into the 4½-foot stack of rules that small business owners also don't know anything about.

*Michael Silverstein asked, again, if anyone could suggest an approach that would work for small business.*

- Exempt 'em.
- What constitutes small business? I asked that at the last meeting. I still don't have an answer. What is the definition? Will they be classified by number of employees, by gross earnings? Or will it be an approach like BC's, where everybody does it?
- I have a question. Aren't there already exemptions for employers with less than 11 employees? Is that OSHA or WISHA?
- That's OSHA.
- How often does WISHA cite employers for anything when they have 10 or fewer employees? What are the odds of catching an employer with an ergonomics violation? My guess is that we go after larger employers because they have more exposure. Small employers are unlikely to be inspected.

*Michael Silverstein answered that WISHA inspects small employers, but their chances of being inspected are smaller. He said with the number of inspectors L&I has, it would take 26 years to inspect every business. He went on to say that L&I does recognize the differences in resources between large and small employers, and this is reflected in the greatly reduced penalties assessed when small employers are cited. He said that the main challenge is to design a rule that offers equal protection for workers in all sizes of firms without breaking the bank for small business.*

- I like the BC model. It's short and sweet. It's flexible and it hits the main points of the five models we've seen. The risk control language is good; it describes an ongoing evaluation with a focus on eliminating or reducing risk factors. For small business, the rule needs to be short, and also needs to be supported by consultation, outreach, and documentation. It also needs industry support.
- I think there would be more job rotation in small businesses. In our smaller branches they rotate more often and the employees are less susceptible to injury. We could use basic education for all employees in Washington. If that resulted in a card, then it would help small employers.
- We need to follow the KISS principle - Keep It Simple, Stupid. I like the BC regulation; it's only two pages. The other things we've been talking about could be supplemental material to the rule. They tried to have a best practice as a part of the rule in BC, but they ended up changing it to a supplemental piece. In terms of prioritizing as part of a program, if you only have three employees, all you really need is a checklist. A medium-size employer might need more guidance when prioritizing. For help, they could turn to a supplement, but that shouldn't be a required part of the rule. I'd recommend a short, simple rule with supplemental material.
- I'm looking for feedback from Jerry and Don, the small business owners here. What do you have internally to let you know about injuries in your workplace? Do you have claims? Do you get feedback from employees on discomfort to use as triggers? Do you look outside for resources? Whether or not there is a rule, you'll need to deal with these things anyway. Show us what practical, effective way might work for small business.
- I don't know if I'm a small business or not because we haven't defined 'small business' yet. I have 60 employees. Does that make me a small business? I know I was one when I started because I only had two people and one of them was me. I have a safety committee and we meet more often than is required. We monitor every job for performance. We're constantly in communication with each other and I'm always getting feedback. If there is an ergonomics rule, then we will comply. But when I was a smaller business, it was different. We were too busy to comply with anything, we just had time to take care of business. That's true for any small business; they won't comply, instead they'll just take the risk. They can't implement this because they have more important things to take care of. We do need to define small business before we can deal with it.
- I like to expand on the earlier comment that we keep education and training separate. Having a card for education that's portable works well for small business. If you send them to a 4-hour course, and spend \$95 per employee, then that's doable. This approach is already being used with hazardous waste training. There are collateral benefits. The employees come back with resources. This would also be good for large businesses that have new employees coming in all of the time.
- Spending \$95 to send someone to training, with 35 employees that's almost \$3,500. That could be 3 months margin for some small business. That's a lot of money and time away from business. A small business can't just move in other people to cover for someone while they're away at training.
- But with portable training, your employees wouldn't necessarily be going to the training when they work for you. They'd be getting the training before coming to you.
- I know I'm a small business because I have seven employees, and one of them is me. One of my employees does 16 different jobs, including running seven different pieces of equipment, operating three different boats, and taking care of all of the packing



equipment as well as the electrical work. To send someone to training even once a month would be hard to schedule. We do a lot of manual labor – bending, stooping, crawling, and lifting. Everybody takes care of each other. But in the last 10 years, with more and more regulations from different agencies, I start to ask, is it worth it. I really like what I saw from Canada. If we're going to have a rule, we have to keep it simple. Have a small hammer, and give some weight to the employers. Then if they don't comply, give L&I a bigger hammer.

*Michael Silverstein asked the committee members to think about this question: The success of the BC rule, short and general as it is, will depend on the private sector – business and*

*labor – developing best practices for an industry to use as a guide and for enforcement. It also depends on having time for industry to come up to speed once the rule was established. Is this a model we want to move toward here?*

- To answer that today would be unfair. I think we need the next three weeks to look more at the BC approach and to talk to others about it.
- I have one point of clarification. Bawan's presentation was specific to the BC ergonomics rule. The program Jim and Ian describe was beyond the rule. Is that correct?

*Michael Silverstein said that was correct.*

## **Possible Common Features of Any Regulatory Package**

*John Peard passed around a handout from L&I's SHARP program and reviewed it with the committee. The handout was a draft document that contained information about State Fund claims for non-traumatic soft tissue MSDs.*

*Michael Silverstein said that SHARP prepared the analysis because L&I had heard from the committee that the rule should not address all musculoskeletal problems, that some were addressed by other rules (e.g., slips and falls). So, SHARP looked at the subset. The bottom line – the subset accounts for 34 percent of all State Fund claims and it includes all soft tissue, non-traumatic claims involving upper and lower extremity, back and neck. The figure for all MSDs – traumatic and non-traumatic, upper and lower extremity, back and neck – would be more than 50 percent of State Fund claims.*

- I have a question about the definitions of MSDs. Aren't blood vessels part of soft tissues – bruising/contusions, etc? Should they be added to the list or is it assumed that they're included?

*Barbara Silverstein said blood vessels are part of the supporting structure and are assumed to be part of soft tissue.*

- Why wouldn't the two definitions of MSDs be combined? It seems to me that they're not mutually exclusive.

*Barbara Silverstein said the second option was based on what we are actually able to extract from the data based on codes. She added that the types and numbers of injuries would probably be pretty much the same if we were able to pull them out by risk factor codes.*

- Do you think that slips, trips, etc. are adequately covered under other standards?

*Michael Silverstein said that it's hard to say if they're "adequately" covered, since they still occur in great numbers.*

- The sudden-trauma MSDs, trips, falls, slips, are covered under other standards – they are all there.

*Michael Silverstein said a lot of sudden or traumatic MSDs were covered by other regulations, some were not.*

- We can look at this from the opposite viewpoint – would there be a benefit to covering slips/trips/falls under this standard? Regardless of whether they're covered adequately elsewhere or not, if there's no benefit to including them then there's no point in putting them in this standard.
- Many of these things are covered elsewhere. We have standards on elimination, working surfaces, handrails and stairs.
- Just to play devil's advocate – part of ergonomics is to design out those things that cause slips, trips and falls. Those factors could have eventually led to an MSD. In some cases, the only reason that an MSD doesn't occur is because a sudden injury occurs first.

#### **4/27/99 Bring Up Later (BUL) List**

The following items were placed on the BUL list during the April 27 meeting:

1. Information from L&I on the number and type of citations issued involving musculoskeletal hazards.
2. Need to continue to consider how a proposal would affect the temporary workforce.